

REMARKS/ARGUMENTS

Claims 6-12 and 16-24 are pending in this application. By this Amendment, claims 10-12 are amended for clarification purposes only, and in response to the Examiner's specific comments. Thus, it is respectfully submitted that the amendments to claims 10-12 do not raise new issues requiring further consideration. Support for the claims can be found throughout the specification, including the original claims and the drawings. Withdrawal of the rejections in view of the above amendments and the following remarks is respectfully requested.

Entry of the amended claims is proper under 37 C.F.R. §1.116 since the amendments: (1) place the application in condition for allowance (for the reasons discussed herein); (2) do not raise any new issues requiring further search and/or consideration (since the amendments amplify issues previously discussed throughout prosecution without incorporating additional subject matter); (3) satisfy a requirement of form asserted in the previous Office Action; and/or (4) place the application in better form for appeal (if necessary). Entry is thus requested.

I. Double Patenting Rejection and Terminal Disclaimer

The Office Action provisionally rejects claims 6-8 under non-statutory obviousness-type double patenting over claims 1-5 of co-pending Application Serial No. 11/088,718 (hereinafter "718 application"). The rejection is respectfully traversed.

Applicants respectfully submit that claims 6-8 of this application are not obvious over claims 1-5 of the '718 application. However, notwithstanding that many of the claims in this application recite features not recited in claims 1-5 of the '718 application, merely to expedite

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prosecution of the application, Applicants include a Terminal Disclaimer. It is respectfully submitted that the Terminal Disclaimer is sufficient to overcome the double patenting rejection. Withdrawal of the provisional rejection of claims 6-8 under obviousness-type double patenting is respectfully requested.

II. Rejection Under 35 U.S.C. §112, Second Paragraph

The Office Action rejects claims 10-12 under 35 U.S.C. §112, second paragraph, as allegedly indefinite. It is respectfully submitted that the amendments to claims 10-12 are responsive to the Examiner's comments, and consistent with the process steps shown in Figures 3 and 4 and the accompanying description(s) thereof in the specification. It is respectfully submitted that claims 10-12 meet the requirements of 35 U.S.C. §112, second paragraph, and thus the rejection should be withdrawn.

It is further submitted that, even without these clarification to the claims, it would be well understood by one of ordinary skill in the art that some form of residual or backup power could be available to accommodate the input and receipt of various commands and the operation of a lock, even though full power may not be applied to the machine for a washing operation.

III. Rejection Under 35 U.S.C. §102(e)

The Office Action rejects claims 6-9, 16-20 and 23 under 35 U.S.C. §102(e) over U.S. Patent No. 6,626,013 to Ohta et al. (hereinafter "Ohta"). The rejection is respectfully traversed.

Independent claim 6 is directed to a method of controlling a door of a drum type washing machine. The method includes comparing in a controller of the washing machine a sensed water

level to a reference water level previously stored in the controller, and locking or unlocking a door based on a result of this comparing step.

Independent claim 16 is also directed to a method of controlling a door of a drum type washing machine. The method recited in independent claim 16 includes unlocking a door when a controller determines that power is not applied to a washing machine, and determining whether water is present in a washing tub of the washing machine when the controller determines that power is applied using a water level sensor. The method also includes unlocking the door when the controller determines that water is not present in the washing tub, and sensing a water level in the washing tub using the water level sensor when the controller determines that water is present in the washing tub and, locking or unlocking the door based on the sensed water level. Ohta neither discloses nor suggests the features of independent claims 6 and 16, or the respective claimed combinations.

Ohta discloses a display operating panel 3 for a top loading washing machine in which numerous different operating functions can be displayed and changed based on a particular operating mode. The top loading washing machine includes a washing tub 6 vertically positioned in an outer tub 4, the tubs 4, 6 being vertically positioned within a frame 1 and a cover 2. A water level sensor 19 detects a water level in the tub 4, and a cover opened/closed sensor 20 senses an opened/closed state of the cover 2. A cover locking mechanism 21 locks the cover 2 as appropriate, and a whirling sensor 22 senses rotation of the tub 4. Operation of the washing machine is controlled by first and second microprocessors 35 and 45.

As the washing machine moves from a first washing step to a first dehydrating step, the opened/closed sensor 20 senses whether the cover 2 is opened or not, as the rapid spin of the dehydrating step could pose a danger to a user if the cover is opened during the rapid spin. If the cover 2 is open, the microprocessor 35 temporarily stops the cycle to ensure safe operation. Once the user closes the cover 2 and presses the start button on the display 3, the microprocessor 35 receives a command confirming that the cover 2 has been closed and resumes the cycle.

Similarly, as the machine moves from the first washing step to the first dehydrating step, the whirling sensor 22 detects a whirl of the tub 4, and issues a warning if the detected whirl is large, indicating an unbalanced load. In this instance, the microprocessor 35 cuts power to the motor to stop the spinning of the tub 4, and releases the cover locking mechanism 21 so that the user can open the cover 2, redistribute items in the tub 4 to correct the unbalance, and restart the cycle.

The microprocessor 35 stops the cycle when the cover opened/closed sensor 20 senses that the cover 2 is opened as the machine progresses into a high speed spin cycle. The microprocessor 35 unlocks the cover 2 if the whirl sensor 22 detects excessive spin in the tub 4. However, Ohta neither discloses nor suggests that the water level sensor 19 compares a sensed water level to a reference water level, nor that the microprocessor 35 locks or unlocks the cover 2 based on a result of this comparison, as recited in independent claim 6. Rather, as the washing machine disclosed by Ohta is a top loading machine, a water level in the tub 4 has no bearing on

whether or not the cover 2 could or should be opened or remain locked, as there would be no detrimental effect in opening the cover 2 if the tub 4 is full of water.

Further, Ohta is silent as to any function of the cover open/closed sensor 20, locking mechanism 21, or cover 2 based on whether or not power is applied to the display 3 and/or the machine. Ohta neither discloses nor suggests that the microprocessor 35 unlocks the cover 2 when power is not applied to the machine, nor that the water level sensor 19 senses a water level when power is applied to the machine and unlocks the cover 2 when the sensed water level indicates that no water is present in the tub 4, as recited in independent claim 16. Additionally, Ohta neither discloses nor suggests locking or unlocking the cover 2 based on the sensed water level, as recited in independent claim 16.

Accordingly, it is respectfully submitted that independent claims 6 and 16 are not anticipated by Ohta, and thus the rejection of independent claims 6 and 16 under 35 U.S.C. §102(e) over Ohta should be withdrawn. Dependent claims 7-9, 17-20 and 23 are allowable at least for the reasons set forth above with respect to independent claims 6 and 16, from which they respectively depend, as well as for their added features.

IV. Rejections Under 35 U.S.C. §103(a)

The Office Action rejects claim 21 under 35 U.S.C. §103(a) over Ohta in view of U.S. Patent No. 5,802,884 to Cavalli. The rejection is respectfully traversed.

Dependent claim 21 is allowable over Ohta at least for the reasons set forth above with respect to independent claim 16, from which it depends, as well as for its added features.

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Further, Cavalli is merely cited as allegedly teaching monitoring a rotating speed of an output shaft to control a rotating speed of a washing basket, and thus fails to overcome the deficiencies of Ohta. Accordingly, it is respectfully submitted that claim 21 is allowable over the applied combination, and thus the rejection of claim 21 under 35 U.S.C. §103(a) over Ohta and Cavalli should be withdrawn.

The Office Action rejects claims 22 and 24 under 35 U.S.C. §103(a) over Ohta. The rejection is respectfully traversed.

Dependent claims 22 and 24 are allowable over Ohta at least for the reasons set forth above with respect to independent claims 6 and 16 from which they respectively depend, as well as for their added features. It is further submitted that the features recited in claims 22 and 24 are not obvious over the disclosure provided by Ohta. Accordingly, it is respectfully submitted that claims 22 and 24 are allowable over Ohta, and thus the rejection of claims 22 and 24 under 35 U.S.C. §103(a) over Ohta should be withdrawn.

V. Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned Joanna K. Mason, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this,

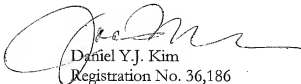
Serial No. **10/720,393**

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concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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